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THE SCHOLASTIC APTITUDE OF VIRGINIA HIGH SCHOOL GRADUATES BEING ATTRACTED TO TEACHER EDUCATION PROGRAMS.

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IN ORDER TO DETERMINE THE RELATION BETWEEN SCHOLASTIC APTITUDE AND THE CHOICE OF TEACHING OR NONTEACHING COLLEGE PROGRAMS, A STUDY WAS MADE OF A REPRESENTATIVE SAMPLE OF VIRGINIA HIGH SCHOOL GRADUATES IN 1963, ENROLLED AS COLLEGE FRESHMEN. OF 1,960 SUCH PERSONS IN THE SAMPLE, 1184 (60 PERCENT) RESPONDED TO THE QUESTION OF WHETHER OR NOT THEY INTENDED A TEACHING CAREER. SCHOLASTIC APTITUDE (SCAT) SCORES WERE SECURED FROM SCHOOL RECORDS. IT WAS FOUND THAT (1) THE MEAN OF SCHOLASTIC APTITUDE TEST SCORES FOR HIGH SCHOOL GRADUATES PLANNING TO BECOME TEACHERS WAS SIGNIFICANTLY LOWER THAN THAT OF THOSE ENTERING COLLEGE WHO PLANNED NONTEACHING CAREERS. (2) MAJOR DIFFERENCES BETWEEN THE DISTRIBUTIONS OF THE SCORES WERE THE HIGHER PROPORTION OF THOSE PLANNING TO BECOME TEACHERS WHO SCORED BELOW THE FIFTIETH PERCENTILE AND THE HIGHER PROPORTION OF THOSE PLANNING NONTEACHING CAREERS WHO SCORED AT OR ABOVE THE NINETIETH PERCENTILE. (3) FORTY-FIVE PERCENT OF THOSE BELOW THE FIFTIETH PERCENTILE PLANNED TO BECOME TEACHERS, WHILE ONLY 28 PERCENT OF THOSE AT OR ABOVE THE NINETIETH PERCENTILE HAD SIMILAR VOCATIONAL PLANS. THE FINDINGS INDICATED THAT TEACHER EDUCATION PROGRAMS DO NOT COMPETE SUCCESSFULLY WITH OTHER FIELDS IN RECRUITING CAPABLE HIGH SCHOOL GRADUATES. THIS ARTICLE IS PUBLISHED IN MADISON COLLEGE BULLETIN, VOLUME 25, NUMBER 2, FEBRUARY, 1967. (RP)

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THE SCHOLASTIC APTITUDE OF VIRGINIA HIGH SCHOOL GRADUATES BEING ATTRACTED TO TEACHER EDUCATION PROGRAMS

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Instructional programs which seek to meet the needs of children and youth in twentieth-century America must cope with educational problems of a size and a degree heretofore unknown in American education. Society has instituted programs of teacher education as one means of securing competent teachers to devise and maintain instructional programs commensurate to the current challenge.

The success of teacher education programs would seem to be at least partially dependent upon the degree of scholastic aptitude possessed by the individuals enrolled in them. Paul Woodring, noted educator and former consultant to the Fund for the Advancement of Education, has urged that effort be made to recruit persons of high intellectual caliber for the teaching profession. Woodring also stated that the desirability of other traits in those who would enter teaching careers should not be allowed to obscure the need for persons of high intellectual caliber.[1] Robert D. North, in a paper presented at the Thirteenth Annual National Conference of the National Commission on Teacher Education and Professional Standards also recognized the need to attract persons with high academic ability to teaching careers and pointed out the value of information concerning the relative scholastic ability of students being attracted to teacher education programs.[2]

Various investigations conducted during the past several decades have indicated that students enrolled in programs of teacher education have tended to possess measured scholastic ability inferior to that possessed by college students in general.

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[1]Paul Woodring, *A Fourth of a Nation* (New York: McGraw Hill Book Company, 1957), p. 240.

[2]Robert D. North, "The Teacher Education Student: How Does He Compare Academically with other College Students?" *The Education of Teachers: New Perspectives* (Washington, D. C.: National Commission on Teacher Education and Professional Standards, National Education Association, 1958), pp. 278-295.

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Therefore, concern about improving the scholastic quality of students enrolling in teacher education programs has been prominent in many discussions of teacher education.

In spite of the above noted concern about the relative scholastic ability of prospective teachers, a search of available literature revealed no research findings which would indicate the relative scholastic ability of Virginia high school graduates who enter college and who plan to become teachers. Undoubtedly, the past efforts of dedicated educators have succeeded in attracting more capable Virginia youth to teaching careers. However, the lack of previous research prohibits the formulation of more definitive statements concerning the relative success of these recruitment efforts in Virginia.

The discussion to follow will relate some recent research findings which give some indication of the relative scholastic ability of Virginia high school graduates who plan to become teachers. These findings were the result of a larger study which was undertaken to explore possible ways of securing more scholastically capable recruits for the teaching profession.

The research reported herein sought to determine the relative scholastic aptitude of 1963 graduates of selected Virginia public secondary schools who entered college and who planned to become teachers. Scholastic aptitude was estimated in this study from the scores earned on the *Cooperative School and College Ability Test, Forms 2A and 2B.*[1] College-attending graduates were 1963 graduates of predominantly white Virginia high schools who were listed by high school principals as attending four-year colleges or junior colleges. Graduates planning to become teachers were those college-attending graduates who indicated on a questionnaire that they planned to become teachers after completing college.

Since it was impractical to study the entire population of 27,793 graduates, the drawing of a 20 per cent representative sample of 1963 graduates of predominantly white accredited secondary schools in the State of Virginia was undertaken. The 1963 graduating classes of 51 high schools were included in the

[1]Cooperative Test Division, Educational Testing Service, *Cooperative School and College Ability Tests, Forms 2A and 2B,* (Princeton, New Jersey: Educational Testing Service, 1956).

sample. The 5,578 graduates in the sample were representative of all 1963 graduates of predominantly white high schools in the State of Virginia in terms of (1) geographic location of graduating high school, (2) size of enrollment of graduating high school, and (3) the rural-urban nature of the general population served by the school division in which the graduating high school was located.

Data concerning the sample were secured from three sources. Scores earned on the *Cooperative School and College Ability Test* were secured from the State Department of Education. Indications of college attendance and addresses of graduates were secured from high school principals. The vocational plans of graduates were inferred from responses contained in questionnaires sent to each college-attending high school graduate.

The relative scholastic aptitude of prospective teachers was determined by comparing the scholastic aptitude test scores of college-attending graduates who were planning to become teachers with similar scores earned by college-attending graduates who were not planning to become teachers. The comparison of scores earned by the teaching and nonteaching groups considered both the means and distributions of scores. Null hypotheses, which stated that there was no significant difference between the means of scores being compared, were tested by the critical ratio method for testing differences between means. A two-tailed test of significance was employed and the significance level was established at the .01 level. The distributions of scores for the groups were divided into four categories in terms of four arbitrarily selected percentile ranks. Chi-square as designed for use in the comparison of two groups was employed to test null hyphotheses concerning the distributions of scores.

Scholastic aptitude test scores and indications of college attendance were secured for 4,447 or 81 percent of the 5,578 graduates in the sample. After this loss of data the remaining sample differed significantly from the population in terms of factors used in sample selection. However, in no case did these differences involve more than 5 per cent of the graduates in the sample.

High school principals indicated that 1,960 of the 4,447 graduates were enrolled in college in September of 1963. Sixty per cent or 1,184 college-attending graduates returned the questionnaires which were mailed to them.

The above data indicated that complete information concerning the entire sample was not secured. The effect of this failure to secure complete information upon the objectives of the study remained undetermined.

Four hundred of the 1,184 college-attending graduates who returned the questionnaires indicated that they planned to become teachers. Sixty-three of the prospective teachers were male graduates. Seven hundred eighty-four of the college-attending graduates were planning nonteaching careers. Four hundred and sixty-three of those graduates planning nonteaching careers were male graduates.

When the scholastic aptitude test scores for the teaching and nonteaching groups were compared the following results were obtained.

1. The mean of scholastic aptitude test scores for high school graduates planning to become teachers was significantly lower than the mean of scores for high school graduates who entered college and who planned nonteaching careers. Similar findings were obtained in separate comparisons of both male and female graduates in the teaching and nonteaching groups.
2. The distribution of scores for the teaching and nonteaching groups differed significantly. Major differences between the distributions were the higher proportion of college-attending graduates planning to become teachers who scored below the fiftieth percentile and the higher proportion of college-attending graduates who planned nonteaching careers who scored at or above the ninetieth percentile.
3. Forty-five per cent of the college-attending graduates who scored below the fiftieth percentile planned to become teachers while only 28 per cent of those who scored at or above the ninetieth percentile had similar vocational plans.

Other findings which might be of interest to teacher educators but which were not directly related to the objectives of the study included the following:

1. Comparison of scores earned by graduates planning to teach in secondary schools and graduates planning to teach in elementary schools indicated no significant differences in either means or distribution of scores.

2. The means of scholastic aptitude test scores earned by male graduates planning to become teachers did not differ significantly from the means of scores for female graduates who planned to enter teaching. However, the distribution of scores for male and female prospective teachers did differ significantly. The major difference between the distributions of scores was the larger proportion of male graduates planning to become teachers who scored below the fiftieth percentile.

3. Estimates of family income level given by graduates planning to become teachers tended to be lower than similar estimates given by graduates planning to enter nonteaching vocations. Fifty per cent of the prospective teachers estimated their family income levels to be below $7,500 while only 34 per cent of the graduates planning not to teach made similar estimations.

The findings of this study tended to agree with previous research which indicated that individuals attending college to prepare for teaching careers tended to possess scholastic ability inferior to that possessed by individuals planning to enter fields other than teaching after campleting college. In addition this study supplied data concerning the scholastic aptitude of graduates of Virginia high schools who were attracted to teacher education programs.

The findings of this investigation indicated that programs of teacher education do not compete successfully with other fields in the recruitment of capable high school graduates. Consideration of the importance accorded programs of teacher education suggests that continued attention should be given to efforts to recruit more capable youth for teacher education programs.

As would be expected, numerous proposals have been made as to how the scholastic quality of prospective teachers might be improved. Establishment of higher admission requirements for teacher education programs, increased economic reward for teachers, revision of teacher education programs, and recruitment of capable noncollege-attending youths are several of the more frequently mentioned approaches to the problem.

However, an even more fundamental challenge confronts the teacher educator who is concerned with the scholastic abilities of those to be educated to become teachers. Not only must he seek to recruit capable youths for teacher education programs but he must also acquire a more definitive understanding of the relationship of scholastic ability to the objectives of the teacher education programs and to the performance of the teaching task.

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